

IN THE CLAIMS:

1. (Currently amended) A device for reduction of organic ~~Sulphur~~ sulphur from high ~~Sulphur~~ sulphur coal, comprising: which comprises

a movable cabinet,

a tubular furnace enclosed in the cabinet,

a reactor inside the furnace and including ~~essentially consisting of three heating zones~~
such as

a steam heating zone capable of maintaining a temperature in the range of 450-
500 degree Celsius ~~centigrade~~,

a promoter zone for heating a promoter therein, the promoter zone being
capable of maintaining a temperature in the range of the order of 950-1100 degree Celsius,
~~centigrade~~ and

a reaction zone for reacting the high sulphur coal with a steam, the reaction
zone being capable of maintaining a temperature in the range of 900-950 degree centigrade,

wherein the said reactor being placed inside a tubular furnace is capable of providing
~~the above said temperature~~ temperatures required by the zones of in the said reactor, the said
~~furnace with reactor inside being enclosed in a movable cabinet, the said reactor and furnace~~
~~being provided with known energy regulators and indicators.~~

2. (Currently amended) A device as claimed in claim 1 wherein the tubular furnace is
made up of Silliminite and insulated by quartz wool.

3. (Currently amended) A process for removal of organic sulphur from high sulphur coal using the device as claimed in claim 1=2, ~~which comprises~~ comprising

heating the promoter zone ~~[[()]]~~containing ~~the~~ a promoter~~[[()]]~~ at a temperature in the range of 1100±50 degree Celsius and the steam zone at a temperature in the range of 450 to 500 degree Celsius,

crushing ~~the~~ an input coal to -72 mesh BS and

feeding the crushed coal into the reaction zone,

producing steam in a flask, ~~preferably made of glass~~ and passing the steam through the reactor,

maintaining the temperature at 900 degree Celsius for about 1 hour, after it attains a temperature of about 900 degree Celsius, passing the gas evolved from the reactor through a series of bubblers, ~~preferably made of glass~~, containing ammoniacal cadmium chloride solution,

cooling the furnace to room temperature and

discharging ~~the~~ a product coke/char.

4. (Currently amended) A process as claimed in claim 3, wherein the promoter ~~used~~ is mixture of copper-iron turnings in the ratio of 1:9.

5. (Currently amended) A process as claimed in claim 3 ~~claims 2-4~~, ~~wherein the rate of rise in~~ further comprising increasing the temperatures ~~temperature~~ in the promoter zone and the reaction zone ~~is~~ at a rate of 5 degree Celsius per minute.

6. (Currently amended) A process as claimed in claim 3 ~~2-5~~ wherein around 80% sulphur from the coal is removed by the process.

7. (New) A device as claimed in claim 1, wherein the steam heating zone has a length of 17mm.

8. (New) A device as claimed in claim 1, wherein the promoter heating zone has a length of 205 mm.

9. (New) A device as claimed in claim 1, wherein the reaction zone has a length of 200 mm.